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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/702,449

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Takuya Morishita

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EXAMINER

WERNER, DAVID N

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,449	<b>Applicant(s)</b> MORISHITA, TAKUYA	
	<b>Examiner</b> David N. Werner	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-19 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 1-12 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 07 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20031107</u> . | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

1. This is the First Action on the Merits for US Patent Application 10/702449.  
Currently, claims 1-23 are pending.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

3. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities: in page 2, line 4, the phrase "of GOP" should be "of a GOP", on page 2, line 23, the phrase "new GOP" should be "a new GOP", and on page 11, line 9, the word "stat" should be "start".

Appropriate correction is required.

***Claim Objections***

5. Claims 1-12 and 20 are objected to for the following informality: the word "edition" is improperly used to mean "editing", but the accepted meaning is "a form of a published work or a version". Appropriate correction is required. It is suggested that the word "edition" throughout the claims, title, and specification be replaced with the word "editing".

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 23 recites "a computer program". Claims directed to software *per se* or not explicitly claimed as encoded in a computer-readable medium have been held as non-statutory. See *In re Warmerdam*, 33 F.3d at 1360-61, USPQ 2d at 1760.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5, 8, 10-16, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2003/0113097 A1 (Shibutani) in view of US Patent 6,532,333 B1 (Ito). Although claim 1 is written in means-plus-function format, it does not invoke 35 U.S.C. 112, § sixth paragraph, because it fails the third prong of the analysis provided in MPEP 2181. The phrase "by using a deletion start frame and deletion frame thereof" is considered modifying by sufficient acts for achieving the specified function of "designating a range of the video/audio to be an edition object". Claims 1, 12, and 23 are coextensive in scope, and dependent claims 2-11 of claim 1 are coextensive in scope with dependent claims 13-22 of claim 12.

Shibutani teaches a video editing apparatus. Regarding claims 1, 12, and 23, in editing multiplexed video/audio data, Shibutan edits DVD video, which is in the MPEG-2 format and is organized in a disc in a structure containing Video Object Units (VOBUs), each of which may contain Video (V-) packs and audio (A-) packs (paragraph 0048). In designating an editing range with a deletion start frame, a user selects the end of a video stream with an editing point (paragraph 0065). The editing point may be a video frame or an audio access unit (paragraph 0066). In rewriting a header in the editing

range for nullified data, in Shibutani, if a picture is to be deleted, its information in a pack is to be replaced with padding data or stuffing data (paragraphs 0068-0072). If more than 8 bytes are to be deleted, the pack is filled with padding. Since the padding data no longer requires a Presentation Time Stamp (PTS) or Decode Time Stamp (DTS) (paragraph 0071), this information can be removed from a Packetized Elementary Stream (PES) packet header (paragraph 0073). The PES header data length field in a packet header is then adjusted to reflect this change (paragraph 0076).

Regarding claims 2 and 13, if a whole audio or video pack is to be deleted, it may become a dummy pack that is set with the stream ID and sub-stream ID fields (paragraph 0078). Regarding claims 4 and 15, figure 14C shows an edited stream without the deleted packs, and figure 14D shows the same stream with the deleted packs as dummy packs. It is often desirable to delete the unnecessary data (paragraph 0078). The edited stream (with or without the dummy packs) may be written to a recording medium such as a hard disk or a DVD-RAM (paragraph 0031). Regarding claims 5 and 16, a dummy video or audio pack is set, and can be identified, to have a special stream ID field and sub-stream ID field (paragraph 0078). Regarding claims 8 and 19, again, the PES header data length field and the PES packet length field in a packet header are updated to reflect the unnecessary data removed from a padding packet (paragraph 0076). Regarding claims 10 and 21, as mentioned previously, Shibutani operates on MPEG (abstract), and edits PES packet headers (paragraph 0076).

Shibutani only teaches cutting data after an endpoint, with a start frame for a deletion range, but does not teach ending this cut with an end frame for the deletion range. Ito teaches an MPEG-2 recording and reproduction system. Regarding the deletion end frame of claims 1, 12, and 23, Ito teaches an editing system that allows a user to cut video previous to a cut position CP (column 5, lines 34-41). The CP may be in the middle of a Group of Pictures (GOP). Regarding claims 3, 11, 14, and 22, Ito checks the picture at the cut position to determine if it is an I-picture, a P-picture, or a B-picture. If this picture is an I-picture, cut video Va before this picture is changed to "reproduction invalid" dummy data. Otherwise, the picture is first re-encoded as an I-picture (column 5, lines 43-65).

Shibutani discloses the claimed invention except for resuming video after a cut range. Ito et al. teaches that it was known to edit a video after cutting the first part of a video data stream. Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to provide for cutting before a designated frame as taught by Ito, since Ito states in column 1, lines 39-49 that such an operation is common in video editing.

10. Claims 6, 7, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibutani and Ito as applied to claims 4 and 15 above, and further in view of US Patent Application Publication 2001/0036355 A1 (Kelly et al.). Shibutani and Ito do not disclose correcting the reproduction time of audio and video data before and after a nullified segment based on an offset. Kelly et al. teaches a method for editing

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MPEG video/audio data streams. Regarding claims 6, 7, 17, and 18, Kelly et al. states that in an edited video containing two MPEG video streams, the PCR, PTS, and DTS timestamps and the continuity counter are discontinuous at the edit point, that is, the point at which the transition from one stream to the other is made (paragraphs 0085-0090). To combat discontinuities, Kelly et al. stores a pointer for the last frame to be displayed in the first stream, corresponding with the deletion start point in the current invention, and a pointer for the first frame to be displayed in the second stream, corresponding with the deletion end point in the current invention. These pointers may be made in reference to a time value (paragraph 0093). Kelly et al. also stores the offset in the presentation time stamps (PTS) of the last frame in the first stream and first frame in the second stream (paragraph 0094). During playback, the PCR, PTS, and DTS time stamps for the second stream are changed based on the offset between the PTS offset described above (paragraph 0110).

The combination of Shibutani and Ito discloses the claimed invention except for correcting a reproduction time of multimedia data based on an offset value. Kelly et al. teaches that it was known to correct timestamps in an edited MPEG data stream based on a PTS offset. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust PCR, PTS, and DTS time stamps in an edited stream as taught by Kelly et al., since Kelly et al. states in paragraph [0110] that such a modification would prevent a playback error such as freezing video or muting audio due to a discontinuity.



11. Applicant cannot rely upon the foreign priority papers to overcome the rejections based on Shibutani because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

### ***Allowable Subject Matter***

12. Claims 9 and 20 would be allowable if rewritten to overcome the objections on informalities set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: claims 9 and 20 are allowable over the prior art because they are directed to synchronizing an edit point in an edit decision list to a point in which an audio track in an audio/video data stream changes format. The closest prior art, US Patent 6,285,825 B1 (Miwa et al.), teaches stuffing video object units to synchronize video data to corresponding audio data in an edit decision list.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,999,692 (Schmidt et al.) teaches synchronizing audio data to edited video data in an edit decision list. US Patent 6,104,441 A (Wee et al.) teaches an editing system that re-encodes frames to eliminate temporal dependencies. US Patent 6,480,669 B1 (Tsumagari et al.) teaches a video "bookmarking" system that allows a user to insert entry points into a video. US Patent

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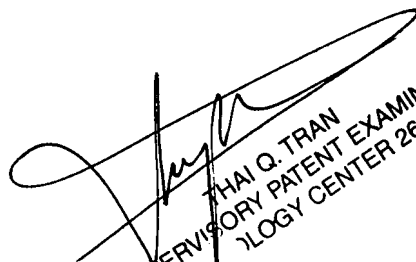
6,594,439 B2 (Imahashi et al.) teaches a system for editing video data based on time codes attached to the picture layer of the video data. European Patent Application Publication 926,678 A2 (Cen et al.) is an English-language version of JP 11-266431 A, cited in the Information Disclosure Statement of 07 November 2003. Japanese Patent Application Publication 11-176083 A (Imai et al.) teaches padding edited MPEG video or audio data units.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Werner whose telephone number is (571) 272-9662. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW



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